

Remarks:

Status of the Claims

Claims 1–5 were previously pending with claims 1, 3, and 5 being independent. Claims 1–4 are presently amended, claim 5 is cancelled, and new claims 6 and 7 are added. Therefore, claims 1–4 and 6–7 are currently pending with claims 1 and 3 being independent.

In the Office Action dated November 2, 2007, claims 1–5 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Claims 1–5 were also rejected under 35 U.S.C. § 102 as being anticipated by Wyatt, U.S. Patent No. 6,490,530.

The Rejections under 35 U.S.C. § 112

Regarding the rejections under 35 U.S.C. § 112, the Examiner argued that the phrase “the one or more data processing and storage servers” as used in claims 2, 4, and 5 lacked antecedent basis, and that the word “substantially” as used in claims 1–5 was a “relative term that renders the claims indefinite.” Claims 2 and 4 have been amended to replace the language “the one or more data processing and storage servers” with “the remote server,” and claim 5 has been cancelled. Furthermore, the word “substantially” has been removed from each of the claims.

The Rejections under 35 U.S.C. § 102

Claim 1

Turning now to the rejections under 35 U.S.C. § 102, independent claim 1 has been amended to recite “establishing a hierarchy of threat *response and evaluation authorities*, wherein the *evaluation authorities* include a plurality of experts having knowledge relevant to making a high-level threat assessment.” (Emphasis added). Support for the amendment is found in the detailed description at page 25, lines 11–21, among other places.

The prior art cited in the Office Action does not teach or suggest each element of claim 1. Wyatt, for example, does not teach or suggest the step of “establishing a hierarchy of threat response and evaluation authorities, wherein the evaluation authorities include a plurality of experts having knowledge relevant to making a high-level threat assessment,” as recited in claim 1. Rather, Wyatt discloses that an aerosol cloud is tracked over a region, and that “[f]rom such threat analyses, the central station warning and alarm processor 22 sends updated information by alarm telemetry means 23 to various civil, police, emergency, and other agencies responsible for population health and safety . . .” (Wyatt, col. 13, line 66–col. 14, line 3, emphasis added). Thus, Wyatt discloses communicating information to *response* entities, and not involving *evaluation* authorities such as “a plurality of experts having knowledge relevant to making a high-level threat assessment” as recited in claim 1.

Furthermore, Wyatt teaches away from “establishing a hierarchy of threat response and evaluation authorities” as recited in claim 1 because Wyatt requires a system for automated real-time analysis and only evaluates aerosols that can be successfully analyzed using an automated process, thus entirely eliminating the need for a hierarchy of threat response and evaluation authorities.

First, Wyatt teaches away from involving evaluation authorities in the warning

process because it is the express purpose of Wyatt to provide a system capable of *automatically* evaluating a threat posed by an aerosol cloud to provide *real time* warnings to appropriate response entities. For example, Wyatt teaches that each of several detector stations each "provide for data collection and real-time processing and analysis," wherein each detector station "must be capable of processing the data it collects and telemetering the results to a central station that would collect such results from all stations for subsequent analysis and make decisions concerning alarms or other warnings." (Wyatt, col. 8, lines 11–12, 16–20, emphasis added). Wyatt further discloses that the central station "monitors the aerosol cloud's position and composition, evaluates all potential threats to the region being monitored . . . and issues alarms and/or near real-time warnings . . ." (*Id.*, col. 8, line 65–col. 9, line 5, emphasis added).

Thus, Wyatt teaches away from involving evaluation experts by requiring automated aerosol evaluation for a real-time warning or alarm. Wyatt repeatedly emphasizes the importance of real-time evaluation and warning. For example, Wyatt teaches that the "[k]ey to any warning system is the ability to detect the aerosol threat as soon as possible after it has been released" (Wyatt, col. 4, lines 14–15), that "it is desirable to provide an early warning" (*id.*, col. 1, lines 48–49), and that it "has often been reasoned that by the time such aerosol threats are detected and identified, it is too late to issue a warning to the potentially affected population" (*id.*, col. 1, lines 53–56).

Second, Wyatt teaches away from involving evaluation experts by providing an automated system that accurately evaluates the particular hazzard of interest and thus would not benefit from additional evaluation by an expert or other person. With particular reference to Fig. 2 (reproduced below), each detector used in the system disclosed in Wyatt includes a spherical scattering chamber (1) capable of passing aerosol particles (15) one at a time and utilizing a laser light beam to capture data relating to each particle by capturing light scattered by each particle using a plurality of light detectors (4) placed around the chamber.

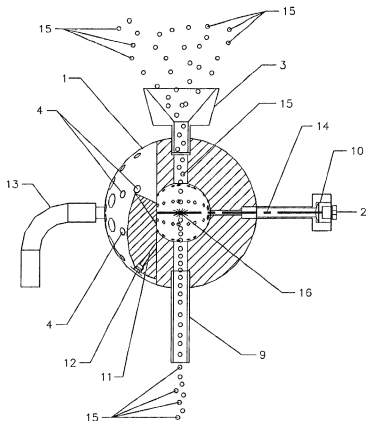


Fig. 2 of U.S. Patent No. 6,490,530

In addition to using the sophisticated aerosol detection system discussed above, Wyatt teaches that an object of the invention is to perform detection promptly and close to a location of release of the aerosol, where “finding a suitable signal becomes far simpler.” (Wyatt, col. 4, lines 29–31). Wyatt teaches that:

[i]n such a huge collection of positively identified aerosol particles, the probability of misclassifying the entire ensemble, and thus the detected event itself, becomes vanishingly small. It is a major objective of the present invention to focus “on the forest,” so to speak, rather than a particular “tree.”

(*Id.*, col. 4, lines 32–36).

Therefore, it would not have been obvious to a person skilled in the art to modify the system disclosed in Wyatt to “establish a hierarchy of threat evaluators and evaluation authorities, wherein the evaluation authorities include including a plurality of experts having knowledge relevant to making a high-level threat assessment” and to “allow the hierarchy of threat evaluators to access the report on the remote server via a wide area network” as recited in claim 1 because Wyatt expressly teaches automating the evaluation process and evaluating aerosols in situations where such evaluations present a high degree of reliability.

Claim 3

Turning now to the rejection of claim 3, claim 3 recites “establishing a hierarchy of threat evaluators, including the appropriate local reporting authority and a plurality of experts having knowledge relevant to making a high-level threat assessment,” therefore the arguments set forth above relating to a similar element of claim 1 are also applicable to claim 3.

Claim 3 has been amended to recite that “the substance is chosen from the group consisting of a solid, a liquid, and a gas.” As explained above, Wyatt discloses detecting and evaluating only aerosols, which is a gaseous suspension of fine particles. The detectors disclosed in Wyatt and illustrated in Fig. 2 are not capable of detecting, for example, a gas. Furthermore, Wyatt teaches away from sensing non-aerosol substances because an express purpose of Wyatt is to provide automated, real-time evaluation of the substance.

Claim 3 has further been amended to recite “determining an actual geographic location of a remote sensing unit detecting the substance using a GPS device located on the remote sensing unit, communicating the actual geographic location to the control unit, and identifying an appropriate local reporting authority and an appropriate local reporting policy based upon the actual geographic location of the remote sensing unit detecting the

substance.”

Wyatt does not teach or suggest this aspect of the invention of claim 3 because, for example, the system of Wyatt does not include GPS or other components for determining a location. Furthermore, Wyatt does not teach or suggest communicating an actual geographic location of a remote sensing unit to a control unit, and using the actual geographic location of the remote sensing unit to identify an appropriate local reporting authority and an appropriate local reporting policy, as recited in claim 3.

Conclusion

For at least the reasons set forth above, applicant respectfully submits that claims 1–4 and 6–7 are in allowable condition and requests a Notice of Allowance. In the event of further questions, the Examiner is urged to call the undersigned. Any additional fee which is due in connection with this amendment should be applied against our Deposit Account No. 19-0522.

Respectfully submitted,
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